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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/151,579	09/11/1998	RAJUGOPAL R. GUBBI	003498.P014	7982

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EXAMINER	
WILLETT, STEPHAN F	

ART UNIT	PAPER NUMBER
2152	21

DATE MAILED: 09/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/151,579	Gubbi et al.
Examiner	**Art Unit**
Stephan Willett	2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-15 and 21-34* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-15 and 21-34* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to because of the informalities noted on the attached PTO 948. Correction is required.

2. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 103

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 7, 12 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baugh et al. with Patent Number 4,251,880 in view of Kos et al. with Patent Number 5,696,761.

6. Regarding claims 1, 7, 12 and 27, Baugh teaches a communication link with many devices. Baugh teaches listening at a first device to a communication channel communicatively coupling two or more components of the computer network with a designated quiet time slot, col. 9, lines 20-23, 28-30. Baugh teaches a device that connects to the network by communication during the quiet time slot, col. 9, lines 17-19. Baugh teaches determining a quiet slot, col. 9, lines 24-27. Baugh teaches the invention in the above claim(s) except for explicitly teaching when the end of a time slot or frame period ends. In that Baugh operates to generate service requests via time slots, the artisan would have looked to the multiplexing arts for details of implementing a connection request. In that art, Kos, a related I/O interface, teaches access to a data link "are to be connected for an idle access time designated time slot", col. 5-6, lines 67-1 in order to transmit data. Kos teaches a fixed group of time slots, col. 6, lines 6-8. Further, Kos suggests that "on e of the two idle time slots is sufficient to make the connection", col. 6, lines 12-13 will result from implementing the connection system. The motivation to incorporate a connection during a certain time frame insures that a device knows when to listen. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the time based connection within certain parameters request as taught in Kos into the device described in Baugh because Baugh operates with time controlled requests and Kos suggests that communication requests can be designated during certain times. Therefore, by the above rational, the above claims are rejected

7. Claims 1-15, 21-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borgstahl et al. with Patent Number 5,909,183 in view of Barrett et al. with Patent Number 5,699,532 and Matsuno with Patent Number 5,548,296.

8. Regarding claim 1-2, 29-31 and 32 Borgstahl teaches an appliance control mechanism.

Borgstahl teaches listening at a first device to a communication channel communicatively coupling two or more components of the computer network as "process includes a query task during which peer determines whether a setup connection is being attempted", col. 6, lines 63-65 and Fig. 6. Borgstahl teaches transmitting the connection request from the first device to a controller of the computer network within a designated quiet time slots as "to monitor wireless communication link to determine whether a signal compatible with a protocol being used by network", col. 7, lines 1-3, 17-20, and as cited in col. 16, l. 33-58 and Fig. 21, and "upon receipt of other external information. The other external information can include information obtained through appliance circuits ... including user input", col 7, lines 19-22. Borgstahl teaches quite times designated to initiate communication at preset lengths, col. 7, lines 11-12. Borgstahl teaches the invention in the above claim(s) except for explicitly teaching a designated time slot and the maximum number of packets. In that Borgstahl operates to generate service requests via an appliance control, the artisan would have looked to the multiplexing arts for details of implementing a connection request. In that art, Matsuno, a related I/O interface, teaches "a local switch has received a request for execution of a handoff through a base station" in order to transmit data. In that art, Barrett, a related I/O interface, teaches "a multi-path channel interface which controls the input and output of data between computer and remote device" in order to transmit data Matsuno teaches *a designated time slot* at col. 8, lines 63-65. A connection request is made at a designated time when the channel is not occupied. Barrett teaches *information sent between the first network device and the server comprises packets and the connection agreement packet further includes information regarding the maximum number of bytes the first network device can send or expect to receive in each packet for each type of data included in a packet* as "it is necessary

for the two stations to specify the maximum buffer size available for reception of data blocks", col. 9, lines 54-56. Further, Barrett suggests that "initially attempts to allocate the local communications facilities into a logical transmission group", col. 10, lines 15-17 will result from implementing the connection system. The motivation to incorporate a connection request at a certain time insures that communications demands are met and communications parameters are satisfied. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the time based connection within certain parameters request as taught in Matsuno and Barrett into the appliance control described in Borgstahl because Borgstahl operates with time controlled requests and Matsuno and Barrett suggests that communication requests can be used in the appliance control environment. Therefore, by the above rational, the above claims are rejected.

9. Regarding claims 2, 29 and 31, Borgstahl teaches *confirming the connection request by transmitting the connection request from the controller to first network device periodically until a response from the first network device is received by the controller* as "s service-providing peer relays data communications between the connected peer and a remote device", col. 9, lines 61-63. Thus, the above claim limitations are obvious in view of the combination.

10. Regarding claims 3, 4, 6, 13, 33 and 34 Barrett teaches *sending, from the controller to the first network device, a connection agreements package including information regarding non-quiet time slots within the communication channel to be used by the controller for transmitting information to the first network device* and *the connection agreement packet further includes information regarding time slots within the communication channel to be used by the first network device when transmitting information to the controller* as "by way of exchange identification (XID) signals which convey the necessary information to the remote partner for

enabling and disabling transmission paths.", col. 8, lines 61-63, also see col. 6, lines 13-15. Thus, the above claim limitations are obvious in view of the combination.

11. Regarding claims 5, Barrett teaches *information sent between the first network device and the server comprises packets and the connection agreement packet further includes information regarding the maximum number of bytes the first network device can send or expect to receive in each packet for each type of data included in a packet* as "it is necessary for the two stations to specify the maximum buffer size available for reception of data blocks", col. 9, lines 54-56. Thus, the above claim limitations are obvious in view of the combination.

12. Regarding claims 7, 27 and 28 Barrett teaches *determining, at a first network device not a current component of the computer network,, whether a communication channel used for communicatively coupling two or more components of the computer network is actively being utilized by the components of the computer network; and transmitting, from the first network device, a message within the communication channel at a time depending upon whether the communication channel is actively being utilized or not* as "as noted above, these multi-path channel allocations merely verify that the requested transmission capabilities are available in the channel paths", col. 7, lines 39-42. Thus, the above claim limitations are obvious in view of the combination.

13. Regarding claims 7, Barrett teaches *determining, at a first network device, whether a communication channel used for communicatively coupling two or more components of the computer network is actively being utilized by the components of the computer network; and transmitting, from the first network device, a message within the communication channel at a time depending upon whether the communication channel is actively being utilized or not* as "as

noted above, these multi-path channel allocations merely verify that the requested transmission capabilities are available in the channel paths", col. 7, lines 39-42. Thus, the above claim limitations are obvious in view of the combination.

14. Regarding claims 8, 9, 10 and 11, Barrett teaches *determining, at a first network device, whether a communication channel used for communicatively coupling two or more components of the computer network is actively being utilized by the components of the computer network; and transmitting, from the first network device, a message within the communication channel at a time depending upon whether the communication channel is actively being utilized or not* as "at the remote MPC interface, the XID-1 messages received on each of the sub-channels of the transmission group are compared to each other to determine if they are identical", col. 10, lines 39-42. Thus, the above claim limitations are obvious in view of the combination.

15. Regarding claims 12, 15, 25 and 26, Barrett teaches *negotiating bandwidth requirements within the communication channel with the first component, which is not a current component of the computer network,* as "determining the size and frequency of the data transmission interface", col. 9, lines 61-63. Thus, the above claim limitations are obvious in view of the combination.

16. Regarding claims 14 and 24, Barrett teaches *authenticating the first component by comparing a client identifier provided by the first component against a list of known clients prior to negotiating bandwidth requirements* as "the negotiation of system parameters and the provision of user-supplied system verification (security) fields (e.g. encrypted passwords)", col. 6, lines 13-14. Thus, the above claim limitations are obvious in view of the combination.

17. Regarding claims 15, Barrett teaches *negotiating bandwidth requirements comprises reallocating bandwidth within the communication channel among the one or more network*

components and the first component as "such allocations merely select and ensure the availability of sub-channels of the size and directions requested", col. 11, lines 26-28. Thus, the above claim limitations are obvious in view of the combination.

18. Regarding claims 21, Barrett teaches *the connection agreement packet comprises a connection agreement command field that identifies the packet, a forward bandwidth field to specify the number of packets that the first network device can expect to receive from the controller, a reverse bandwidth field to specify the number of packets that the first network device may send to the controller, a field that specifies a preceding on-line network device and a network on-line number* as shown in Figure 2. Thus, the above claim limitations are obvious in view of the combination.

19. Regarding claims 22 and 23, Barrett teaches *subclients* as "activating a particular sub-channel of multi-path channel group", col. 9, lines 17-18 with the client respectively assuming the role of a sub-client. Thus, the above claim limitations are obvious in view of the combination.

Response to Amendment

20. The broad claim language used is interpreted on its face and based on this interpretation the claims have been rejected.

21. The limited structure claimed, without more functional language, reads on the references provided. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

22. Applicant suggests "only if the channel is silent does the device in question make a transmission", Paper No. 20, Page 6, lines 13-4. However, Borgstahl teaches quite times designated to initiate communication at preset lengths, col. 7, lines 11-12, among other more

involved connection methods suggested at col. 7, lines 17-20. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is disclosed in the Notice of References Cited. The other references cited teach numerous other obvious ways to perform interrupts or scheduled interrupts, thus a close review of them is suggested.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephan Willett whose telephone number is (703) 308-5230. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

25. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-6606.

26. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9605..

sfw

August 23, 2002

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